

Air Quality Regulations Affecting Distributed Energy Projects



**Mike Kendall
Senior Air Project Manager
URS Corporation**

TOPICS

- **Title V Operating Permits**
- **Synthetic Minor Permits**
- **New Source Review**
 - **Non-attainment new source review**
 - **Prevention of significant deterioration**
- **Proposed National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

TITLE V OPERATING PERMITS

- CAAA of 1990 Required U.S. EPA to Issue Regulations Implementing State-run Program for Operating Permits – 40 CFR Part 70
- Virginia's Regulations Codified at 9 VAC 5-80-50 Through 9 VAC 5-80-300
- 228 Permits Issued by VADEQ Since 1998

TITLE V OPERATING PERMITS

- **General Requirements**
 - **All major sources, MACT, and NSPS Sources must obtain a permit**
 - **Public review of application**
 - **Must be renewed every 5 years**
 - **Payment of annual fees based on previous year's emissions**
 - **Submittal of annual compliance certification signed by responsible official**

TITLE V OPERATING PERMITS

- **Advantages**

- **One concise permit that specifies all requirements and sources clearly**
- **No requirement of living just below the major source ceiling**

TITLE V OPERATING PERMITS

- **Disadvantages**

- **Substantial effort required to assemble application**
- **Significant recordkeeping**
- **Increased responsibilities for managing changes**
- **Potentially expensive monitoring requirements**
- **Public review of the application**
- **Criminal penalties for non-compliance**

SYNTHETIC MINOR PERMITS

- **Method to Avoid Title V and Other Major Source Permits**
- **Obtain State Operating or Construction Permit With Federally-enforceable Emission Limits**
- **Emissions Capped Below Major Source Thresholds**

SYNTHETIC MINOR PERMITS

- **Advantages**

- **Reduced reporting and recordkeeping burdens**
- **Reduced regulatory scrutiny**
- **Permitting of new sources simpler**

SYNTHETIC MINOR PERMITS

- **Disadvantages**

- **Future growth may result in requirement for Title V permit**
- **Increased lead-time to evaluate impact of future changes in operation**
- **Recordkeeping to demonstrate that emissions remain below major source thresholds**

PROPOSED NESHAPs

- **Reciprocating Internal Combustion Engines (RICE)**
- **Combustion Turbines**

RICE

- Proposed rule published in *Federal Register* 12/19/02 - 40 CFR Part 63 Subpart ZZZZ
- Affected units – Rating > 500 bhp located at a major HAP source
- Reduce emissions of formaldehyde, acrolein, methanol, and acetaldehyde
- Approximately 10,000 units will be affected

COMBUSTION TURBINES

- Proposed rule published in *Federal Register* 01/14/03 - 40 CFR Part 63 Subpart YYYY
- Affected units
 - Rating = 1 MW located at a major HAP source
 - Units burning landfill gas or digester gas as the primary fuel are exempt
- Reduce emissions of formaldehyde, toluene, acetaldehyde, and benzene
- Approximately 155 new units and 160 existing units will be affected

ADDITIONAL INFORMATION

Mike Kendall
Senior Air Project Manager
URS Corporation
(703) 713-6526
mike_kendall@urscorp.com